Notice of Allowability	Application No.	Applicant(s)	
	10/776,662	ENGELLAND ET AL.	,
	Examiner	Art Unit	
	Minh-Chau T. Pham	1724	
The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT F of the Office or upon petition by the applicant. See 37 CFR 1.31	S (OR REMAINS) CLOSED in (i) or other appropriate commur RIGHTS. This application is su	this application. If not included nication will be mailed in due course. TH !	
1. \boxtimes This communication is responsive to <u>Response filed on 1</u>	<u>1/28/06</u> .		
2. ☑ The allowed claim(s) is/are <u>1-13</u> .			
 3. Acknowledgment is made of a claim for foreign priority to a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 	ve been received.	•	
3. Copies of the certified copies of the priority de			ie
International Bureau (PCT Rule 17.2(a)).			
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE noted below. Failure to timely comply will result in ABANDON THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	" of this communication to file a MENT of this application.	a reply complying with the requirements	
4. A SUBSTITUTE OATH OR DECLARATION must be subr INFORMAL PATENT APPLICATION (PTO-152) which give			
5. CORRECTED DRAWINGS (as "replacement sheets") mu	ust be submitted.		
(a) I including changes required by the Notice of Draftsper		(PTO-948) attached	
1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date			
(b) ☐ including changes required by the attached ExaminesPaper No./Mail Date	r's Amendment / Comment or i	n the Office action of	
Identifying indicia such as the application number (see 37 CFR each sheet. Replacement sheet(s) should be labeled as such in	1.84(c)) should be written on the the header according to 37 CFR	drawings in the front (not the back) of 1.121(d).	
 DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT 	osit of BIOLOGICAL MATE FOR THE DEPOSIT OF BIOL	RIAL must be submitted. Note the LOGICAL MATERIAL.	
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5. ☐ Notice of Info	ormal Patent Application	
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)	6. 🔲 Interview Sur	nmary (PTO-413),	
3. Information Disclosure Statements (PTO/SB/08),	Paper No./M 7. ☐ Examiner's A	lail Date mendment/Comment	
Paper No./Mail Date 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. ⊠ Examiner's S	statement of Reasons for Allowance	
7-1		Minh-Chau Pham	
		Patent Examiner	
		Art Unit; 1724	

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Allowable Subject Matter

Claims 1-13 allowed.

The closest relevant art is the European reference (WO 00/74818 A1), in view of the French Patent (FR 2,034,160), and further in view of Finnerty et al (6,190,432 B1).

The European reference discloses a method of installing a filter cartridge into a housing comprising the steps of providing a filter cartridge (500) with a seal arrangement (543) including a sealing gasket (544) positioned to axially seal the filter inside the housing (page 44, line 30 through page 45, line 22), a projection arrangement including projections (see 814 in Fig. 42) extending outwardly from opposite side of the filter sheath (page 43, line 24 through page 44, line 1), providing a filter housing with first and second opposite ends and sidewall defining a top, a bottom and opposite sites and an access cover removable from the housing (see details of Fig. 1), inserting the filter cartridge into the housing by engaging the projections extending outwardly from opposite sides of the filter sheath (page 44, lines 4-10), sealing the filter cartridge into the housing by compressing the seal arrangement in thickness (page 44, line 30 through page 45, line 6), and retaining biasing engagement between the housing and the filter cartridge via a retention or lift mechanism (602) (see page 45, line 23 through page 46, line 4; page 47, lines 8-14). Claims 1-13 differ from the disclosure or the European reference in that the filter cartridge comprising a sheath surrounding the filter having projections for biasing the filter cartridge against an end of the housing with the seal arrangement, and a z-filter media within a sheath. The French reference discloses a sheath (B) positioned surrounding the filter media (15), a projection arrangement

including projections (17) extending outwardly from opposite sides of the sheath (B), a filter cartridge (15) being positioned inside the housing with a portion of the air cleaner arrangement in engagement with the projections (17) on the sheath (B) and thereby axially driving the filter cartridge (15) and axially sealing the seal arrangement (4-7) against the housing (see Figs. 2 & 3). Finnerty et al disclose an air filter cartridge (see Figs. 10 & 11) comprising a z-filter media (455) coiled in a non-circular configuration having two semi-circular ends (511, 512) and which are joined by a pair of straight segments.

Claims 1-13 of this instant patent application differ from the disclosure of the European reference (WO 00/74818 A1), the French Patent (FR 2,034,160), and Finnerty et al (6,190,432 B1) in that the filter being a z-filter having a sheath with a projections extending outwardly from opposites sides of the sheath and the step of sealing the filter cartridge in the housing by engaging the projections extending outwardly from opposite sides of the sheath with structure inside of the housing and biasing the filter cartridge against an end of the housing with the sealing arrangement providing an axial seal between the filter cartridge and the housing.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Chau T. Pham whose telephone number is (571) 272-1163. The examiner can normally be reached on Mon/Tues/Thur/Fri 7:00 am - 5:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Minh-Chau Pham Patent Examiner

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February 12, 2007

DUANE SMITH
PRIMARY EXAMINER

2-15-07